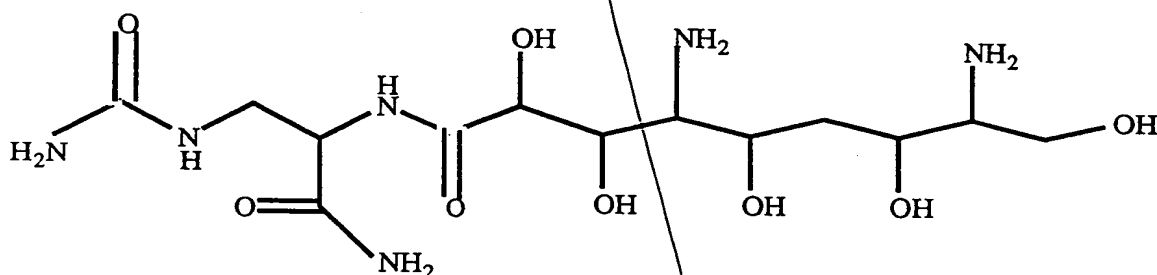


WHAT IS CLAIMED IS

1. A mutant of a *Bacillus* strain which produces a factor which potentiates the pesticidal activity of a *Bacillus* related pesticide, wherein the amount of the factor produced by the mutant is greater than the amount of the factor produced by a corresponding parental strain, wherein said *Bacillus* strain is selected from the group consisting of *Bacillus licheniformis*, *Bacillus subtilus*, and *Bacillus thuringiensis*.
2. The mutant according to claim 1, wherein the mutant produces at least about 2 times more factor than the corresponding parental strain.
3. The mutant according to claim 1, wherein the factor has <sup>1</sup>H NMR shifts at about  $\delta$ 1.5, 3.22, 3.29, 3.35, 3.43, 3.58, 3.73, 3.98, 4.07, 4.15, 4.25, and 4.35, and <sup>13</sup>C shifts at about 31.6, 37.2, 51.1, 53.3, 54.0, 54.4, 61.5, 61.6, 64.1, 65.6, 158.3, 170.7, and 171.3.
4. The mutant according to claim 1, wherein the factor has the structure I or salt thereof



5. The mutant according to claim 1, wherein the *Bacillus* strain is a *Bacillus thuringiensis* strain.



deposited with the NRRL, having an accession number of NRRL B-xxxx.

5 9. The mutant according to claim 1, wherein the *Bacillus* related pesticide comprises a *Bacillus thuringiensis* delta-endotoxin or a pesticidally-active fragment thereof.

10 10. The mutant according to claim 9, wherein the *Bacillus thuringiensis* delta-endotoxin or the pesticidally-active fragment thereof is selected from the group consisting of CryI, CryII, CryIII, CryIV, CryV, and CryVI.

15 11. The mutant according to claim 10, wherein the *Bacillus thuringiensis* delta-endotoxin or the pesticidally-active fragment thereof is a CryIA delta-endotoxin or a pesticidally-active fragment thereof.

20 12. The mutant according to claim 10, wherein the *Bacillus thuringiensis* delta-endotoxin or the pesticidally-active fragment thereof is a CryIC delta-endotoxin or a pesticidally-active fragment thereof.

25 13. The mutant according to claim 1, wherein the *Bacillus* related pesticide comprises a *Bacillus thuringiensis* spore.

14. The mutant according to claim 1, wherein the factor is obtained by

- 30 (a) culturing the mutant of the *Bacillus* strain under suitable conditions;
- (b) recovering a supernatant of the culture of the mutant of step (a); and
- (c) isolating the factor from the supernatant of step (b).

35 15. The mutant according to claim 14, wherein the factor is obtained from the supernatant of the culture of a *Bacillus thuringiensis* strain.

16. A method for obtaining the mutant of claim 1 comprising

- (a) treating a *Bacillus* strain with a mutagen;
- 5 (b) growing the mutated *Bacillus* strain of step (a) under suitable conditions for selecting the mutant; and
- (c) selecting the mutant of step (b).

17. A mutant of a *Bacillus* strain obtained according  
10 to the method of claim 16.

Add A6, A7, A8,  
A9, A10, A11

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